

CLAIMS

What is claimed is:

1. A composition comprising a water-in-oil emulsion fluid for use in the drilling, completion or workover of a subterranean well, said emulsion fluid comprising:

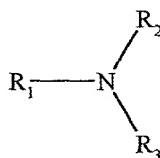
- A) a base comprising at least one liquid hydrocarbon;
- B) an aqueous phase; and
- C) an emulsifier comprising at least one amide prepared by reacting at least one fatty amine with at least one polycarboxylic acid.

2. The composition of claim 1 wherein the liquid hydrocarbon base is selected from the group consisting of vegetable oil, mineral oil, synthetic hydrocarbon oil, and diesel oil.

3. The composition of claim 2 wherein the liquid hydrocarbon base is a synthetic hydrocarbon oil.

4. The composition of claim 3 wherein the synthetic hydrocarbon oil is a polyalphaolefin.

5. The composition of claim 1 wherein at least one fatty amine is of the structural formula



wherein R_1 , R_2 , and R_3 are selected from the group consisting of hydrogen, hydrocarbyl groups, and hydrocarbyl groups substituted with functional groups, provided that at least one

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of R₁, R₂, or R₃ is a C₈ or greater hydrocarbyl group.

6. The composition of claim 5 wherein said fatty amine is selected from the group consisting of oleylamine, 1-dodecylamine, di-n-octadecylamine, tri(isodecyl)amine, dimethyl-n-decylamine, bis(2-hydroxyethyl)dodecylamine, tallow amine, bis(2-hydroxyethyl)tallowamine, and bis(2-hydroxypropyl)dodecylamine.

7. The composition of claim 6 wherein said fatty amine is a tallow amine.

8. The composition of claim 1 wherein the polycarboxylic acid is selected from the group consisting of lactic acid, glycollic acid and ether derivatives thereof, succinic acid, malonic acid, (ethylenedioxy) diacetic acid, maleic acid, diglycollic acid, tartaric acid, tartronic acid, fumaric acid, citric acid, aconitic acid, citraconic acid, carboxymethyloxysuccinic acid, lactoxysuccinic acid, 2-oxy-1,1,3-propane tricarboxylic acid, oxydisuccinic acid, 1,1,2,2-ethane tetracarboxylic acid, 1,1,3,3-propane tetracarboxylic acid, 1,1,2,3-propane tetracarboxylic acid, cyclopentane-cis, cis, cis-tetracarboxylic acid, cyclopentadienide pentacarboxylic acid, 2,3,4,5-tetrahydrofuran-cis, cis, cis-tetracarboxylic acid, 2,5-tetrahydrofuran-cis-dicarboxylic acid, 1,2,3,4,5,6-hexane-hexacarboxylic acid, mellitic acid, pyromellitic acid, and phthalic acid.

9. The composition of claim 1 wherein the polycarboxylic acid is a dicarboxylic acid or a tricarboxylic acid.

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10. The composition of claim 9 wherein the polycarboxylic acid is a tricarboxylic acid.
11. The composition of claim 10 wherein the tricarboxylic acid is citric acid.